

Corporate Investment Decisions Using DCF

When corporations decide to pursue an investment, such as buying equipment, they do capital budgeting. Capital budgeting is the activity in which corporations evaluate projects and investments by calculating its potential returns. One of the methods they use for capital budgeting is the [discounting cash flows valuation](#) (DCF), and we will discuss how corporations use this to make their investment decisions.

DCF Explained:

DCF is a method where one evaluates a project's value **today** based on the potential return that this project can **yield in a few years**. To compute the project's current valuation, you need to have estimates of the annual net cash inflow, the number of years, and the discount rate.

To get the project's value today or the **net present value (NPV)**, we need to know the discount rate. The discount rate is the number we use to get the current value for future inflows. We use a discount rate to account for the **Time Value of Money (TVM)**. TVM means that USD 200.00 you have today is worth more than the USD 200.00 after a year. A discount rate of 12% would mean that your USD 200.00 today is worth USD 224.00 in a year.

Now, let's say a corporation is given two projects, with both projects having a discount rate of 12%:

Project 1	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Net Inflow	(100,000.00)	15,000.00	30,000.00	45,000.00	45,000.00	45,000.00
Net Present Value	(100,000.00)	14,285.71	27,210.88	38,872.69	37,021.61	35,258.68

Project 2	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Net Inflow	(100,000.00)	45,000.00	45,000.00	45,000.00	30,000.00	15,000.00
Net Present Value	(100,000.00)	42,857.14	40,816.33	38,872.69	24,681.07	11,752.89

Looking at both projects, assuming it will only last five years, if we look at the net inflow, it would seem like both projects are the same. Both projects yielded a value of 80,000.00, but that is not the case. A reason we factor in TVM is that money today can be used for other projects and potentially grow. By following the concept of TVM and discounting the

cash flows, we arrived at a value of 52,649.57 for project 1 and 58,980.13 for project 2. This means that, comparatively, **project 2 will be a better choice than project 1.**

Why Use DCF:

While there are other methods corporations use for investment decisions, why do they use the DCF? Firstly, it allows for easy comparison of projects while accounting for the risks over their useful life. It also accounts for the TVM, which reflects the current value of each investment decision. With this, we account for the timelines of the projects, the risks, and the forecasted returns into the valuation. Aside from using this to compare projects, corporations can use DCF to decide whether to invest in a single project. If NPV is greater than 0, it would mean that they would have gained from the project, so the corporation should invest.

Conclusion:

When corporations make investment decisions, DCF is one of the better methods to use. They can either use this to decide on a project or compare the returns of multiple opportunities and choose the best one.